

Brown County

8/31/2020

Background Statistics¹

Number of farms: 510

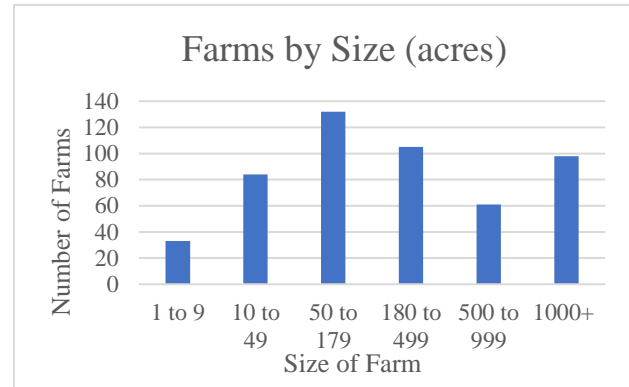
Average size: 611 acres

Land in farms: 311,595 acres

Average value of products sold per farm: \$258,516

Average net cash farm income per farm: \$68,333

1: Data from USDA 2017 Census of Agriculture



Estimated Economic Contribution of Agriculture and Agriculture Related Sectors to the Brown County Economy

Methodology

The estimated economic contribution of agriculture and agriculture related sectors was computed using the most recent IMPLAN data available (2018) adjusted for 2020. The IMPLAN modeling system was used to calculate the results of this analysis. The IMPLAN model was constructed so that double counting was avoided. For this report, 25 of the 71 agriculture and agriculture related sectors in Kansas were identified and analyzed to determine their overall contribution to the Brown County economy.

Results

These 25 sectors have a total direct output of approximately **\$623.1 million** and account for **1,271 jobs** in Brown County. Running the model for all 25 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Brown County Economy					
Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	1,271	18%	\$150,600,000	25%	\$623,100,000
Indirect Effect	456	6%	\$38,600,000	6%	\$88,800,000
Induced Effect	239	3%	\$18,600,000	3%	\$35,400,000
Total Effect	1,966	27%	\$207,900,000	34%	\$747,400,000

NOTE: Individual effects may not equal the total effect due to rounding.

As shown in the above table, agriculture, food, and food processing sectors support a total of **1,966 jobs**, or **27%** of the entire workforce in the county. The total final sales of all products in these sectors is approximately **\$747.4 million**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of Gross Regional Product (GRP). Total value added by the 25 agriculture, food, and food processing sectors is approximately **\$207.9 million**, or **34%** of the GRP.

Top Ten Sectors by Employment

Out of the agriculture and agriculture related sectors, food product machinery manufacturing is the top employer with **355 jobs**. This table also illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Brown County.

Sector	Total Employment
Food product machinery manufacturing	355
Grain farming	170
Dog and cat food manufacturing	169
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	158
Other animal food manufacturing	86
Landscape and horticultural services	80
Animal production, except cattle and poultry and eggs	76
Wholesale - Other nondurable goods merchant wholesalers	72
Other local government enterprises	62
Farm machinery and equipment manufacturing	56

Top Ten Sectors by Output

This table shows how much revenue is generated in other sectors by having a strong agriculture industry, including direct, indirect, and induced effects. The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top contributor, with approximately **\$45.8 million** to the Brown County economy.

Sector	Total Output
Dog and cat food manufacturing	\$229,400,000
Food product machinery manufacturing	\$114,900,000
Other animal food manufacturing	\$96,300,000
Grain farming	\$56,500,000
Oilseed farming	\$53,700,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$25,100,000
Farm machinery and equipment manufacturing	\$23,700,000
Wholesale - Other nondurable goods merchant wholesalers	\$19,700,000
Other local government enterprises	\$16,900,000
Animal production, except cattle and poultry and eggs	\$12,300,000

All Direct Sectors

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Brown County economy. IMPLAN sectors are assigned based on North American Industry Classification System (NAICS) codes. Generally, this analysis includes three categories; production, manufacturing/processing, and services. Note that this analysis does not include wholesale or retail sales of final products, or ethanol production.

Sector	Total Output	Total Employment
Dog and cat food manufacturing	\$229,396,098.62	169.05
Food product machinery manufacturing	\$114,860,849.65	354.78
Other animal food manufacturing	\$96,342,513.11	85.97
Grain farming	\$56,483,965.19	169.51
Oilseed farming	\$53,651,790.14	42.40
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$25,071,206.97	157.59
Farm machinery and equipment manufacturing	\$23,738,011.63	55.74
Animal production, except cattle and poultry and eggs	\$12,257,649.62	76.29
Landscape and horticultural services	\$4,437,166.62	80.30
Veterinary services	\$1,562,553.45	18.18
All other crop farming	\$1,123,429.79	26.89
Poultry and egg production	\$850,715.16	0.98
Bread and bakery product, except frozen, manufacturing	\$521,765.32	4.09
Support activities for agriculture and forestry	\$443,082.91	12.41
Dairy cattle and milk production	\$438,058.04	0.81
Greenhouse, nursery, and floriculture production	\$394,202.18	2.69
Frozen cakes and other pastries manufacturing	\$354,273.23	4.09
Vegetable and melon farming	\$334,867.61	2.04
Other snack food manufacturing	\$319,065.77	0.64
Roasted nuts and peanut butter manufacturing	\$252,961.08	0.64
Commercial hunting and trapping	\$127,836.03	4.83
Commercial logging	\$55,399.19	0.64
Forestry, forest products, and timber tract production	\$41,836.96	0.61
Fruit farming	\$22,564.88	0.15
Tree nut farming	\$2,899.34	0.05

The following terms are used throughout the results shown in this report:

- **Direct effect:** the contribution from agricultural and food products
- **Indirect effect:** the contribution from farms and agricultural businesses purchasing inputs from supporting industries within the state
- **Induced effect:** the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the state
- **Value added** = labor income + indirect business taxes + other property type income
- **Gross Regional Product** = final demand of households + government expenditures + capital + exports – imports – institutional sales
- **Output** = intermediate inputs + value added
- **Employment:** full-time/part-time annual average i.e., 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job is neither full-time nor part-time.
- Due to confidentiality policies that exist within several agencies from which IMPLAN collects their data, some sectors in some regions may not have all data available.

For more information, contact the Division of Agricultural Marketing, Advocacy and Outreach Agency Economist
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